

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 20, 2012

Via E-mail

Mr. Douglas T. Dietrich Senior Vice President-Finance and Treasury and Chief Financial Officer Minerals Technologies Inc. 622 Third Avenue New York, NY 10017-6707

Re: Minerals Technologies Inc.

Form 10-K

Filed February 27, 2012

File No. 1-11430

Dear Mr. Dietrich:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended December 31, 2011

Management's Discussion and Analysis, page 18

Contractual Obligations, page 25

- 1. In future filings, please revise your table of contractual obligations as follows:
 - Include your interest commitments under your interest-bearing debt in this table, or provide textual discussion of this obligation below the table. If you provide a textual discussion, the discussion should quantify the interest payments using the same time frames stipulated in the table. Regardless of whether you decide to include interest payments in the table or in textual discussion below the table, you should provide appropriate disclosure with respect to your assumptions of your estimated variable rate interest payments. We note from page 29 that 48% of your bank debt bears interest at variable rates.

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• Present in this table funding contributions to your pension plans for at least the following year and, if known, for subsequent years. In this regard, we note your statement on page F-25. Include a footnote to the table that (1) discusses the basis for inclusion or exclusion of these obligations and (2) explicitly states the periods for which no amounts have been included in the table.

Critical Accounting Policies, page 25

- 2. We have made the following observations based on information in the Benefit Plans footnote:
 - The \$84.7 million net actuarial loss (page F-22) is material to shareholders' equity;
 - The \$40.5 million of actuarial losses (page F-21) materially impacted the funded status of your pension plans; and
 - The \$3.1 million actual return on plan assets (page F-21) decreased significantly in 2011 and adversely impacted the funded status of your pension plans.

Since the \$15.3 million pension expense (page F-22) is 22% of 2011 net income, in future filings, please disclose in MD&A any factors that materially impacted the funded status of your plans and/or OCI for each period presented. The expected future impact of these material factors should also be disclosed in MD&A, such as a potential decrease in the assumed return on plan assets. The existing critical accounting pension disclosures on page 27 do not explain the adverse results that occurred in 2011.

Form 10-Q for the period ended September 30, 2012

Management's Discussion and Analysis, page 16

- 3. In your Executive Summary for each of the Forms 10-Q filed in 2012, you include disclosures regarding new product offerings or systems, and new agreements entered into to provide product or build facilities. However, it is not clear whether or how these developments, trends and uncertainties will have, or are reasonably likely to have, a material impact on your operations, revenues or income or result in your liquidity decreasing or increasing in any material way. For example, we note the following:
 - In your April 1, 2012, Form 10-Q, you state on page 16 you signed one new agreement for your Fulfill E-325 Technology at your first paper mill in North America. By the end of the third quarter, you had entered into 11 such commercial agreements. However, you do not discuss the impact of these agreements, which if material, would be helpful for readers given the decrease in sales you have experienced during 2012.
 - In your July 1, 2012, Form 10-Q, you state on page 16 that you signed an agreement to perform all refractory maintenance at a greenfield steel mill in Bahrain that is due to start up during the third quarter of 2012. However, it does not appear you have reported on the progress of this agreement or the steel mill start up in the September 30, 2012, Form 10-Q.

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• In your September 30, 2012, Form 10-Q, you state on page 16 that you signed a contract to build a satellite PCC facility in China and launched a new laser measurement system within your Ferrotron subsidiary. However, you do not discuss the timing and expectations regarding these projects.

Therefore, in future filings, please revise your disclosures to provide readers with an understanding of the scope of such material agreements or projects through the eyes of management. This would include a discussion of the material terms of each agreement entered into, including the date you signed the agreement, the product or geographical markets expected to be significantly impacted, the expected timing of major operational events or milestones, and any other information or factors that would help investors better understand the context in which you present your results of operations analysis.

Liquidity and Capital Resources, page 23

4. Please confirm to us you were in compliance with the sole financial covenant ratio included in your debt agreements at April 1, 2012, July 1, 2012 and September 30, 2012. Please revise future filings to state, if true, you were in compliance therewith as of the latest balance sheet date.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Jenn Do at (202) 551-3743, or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien Branch Chief